

Overview of CWD Testing at TVMDL

Dr. Amy Swinford, Interim Director

Dr. Terry Hensley, Assistant Director

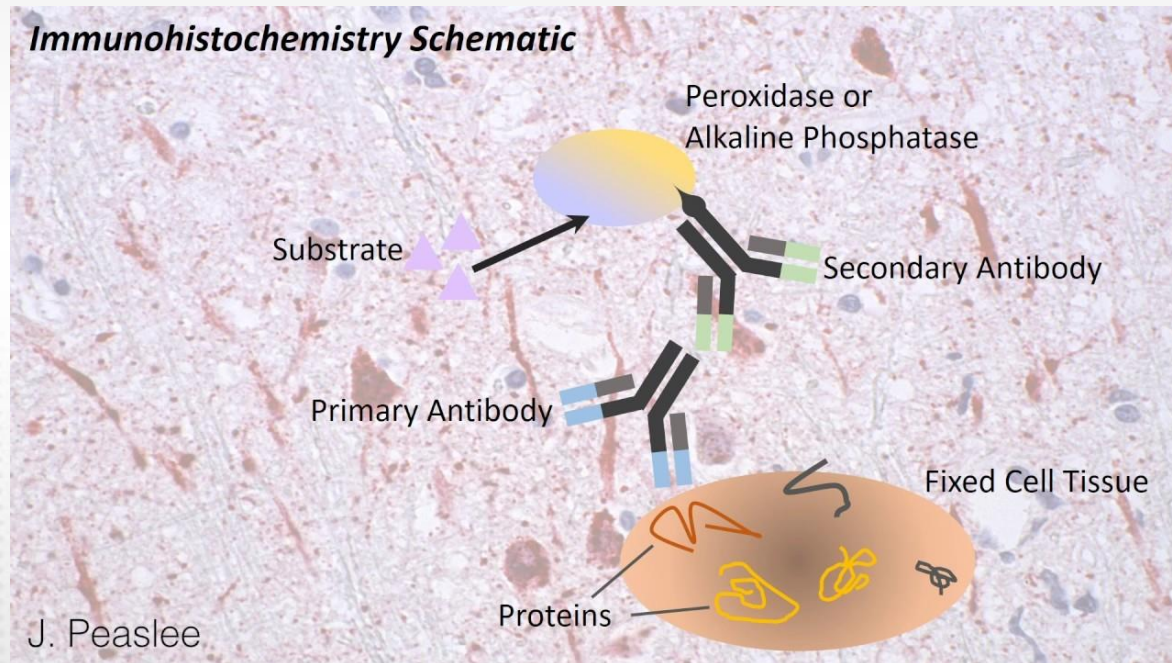
September 29, 2021

CWD Standard Operating Procedure

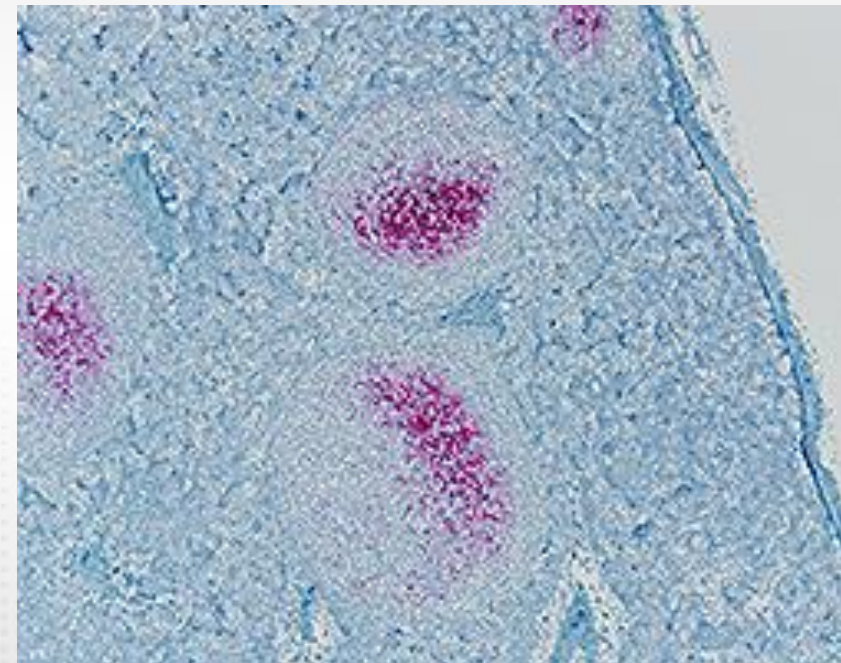
- TVMDL's SOP must follow and reference NVSL SOP-PS-0002
- There is a single SOP for CWD and Scrapie IHC (same anti-prion kit)
- TVMDL operates under a Planned Deviation for antemortem testing approved by NVSL (validated by NVSL)
- CWD IHC on post- and ante-mortem samples
- CWD ELISA on post-mortem (mostly hunter-harvested) samples

CWD IHC – gold standard test

- Monoclonal antibody detects same 3 PrP spikes in scrapie, CWD, BSE



(Cornell Wildlife Health Lab)



(USDA APHIS)

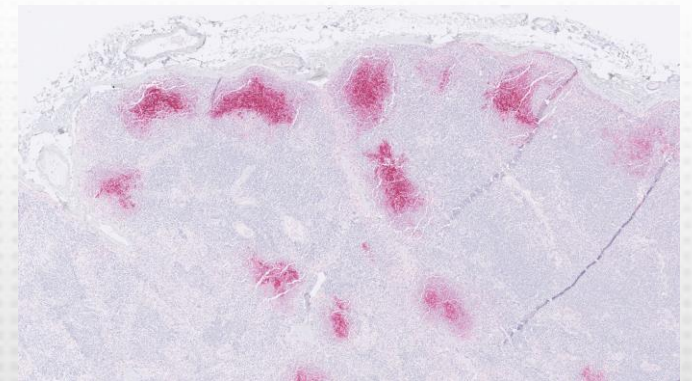
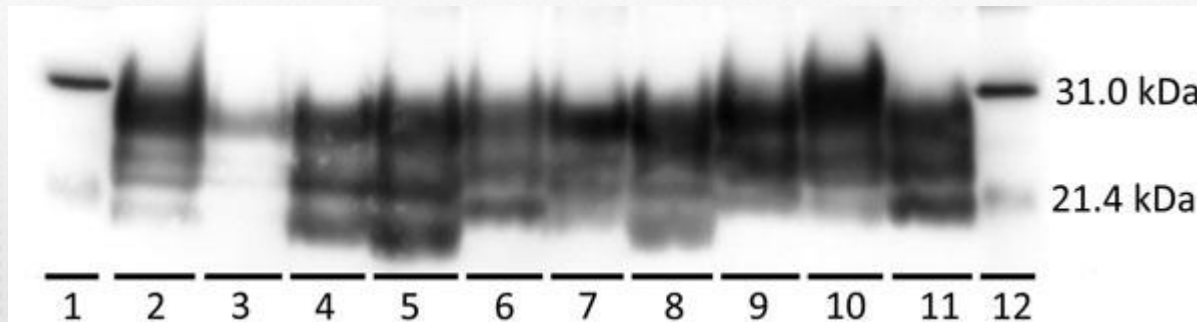
IHC Overview

- 13 major steps in the procedure, most are manual
- 3 automated steps – processing, staining, cover-slipping
- 4-day process assuming no backlog
- Total processing time = 27 hours
- 2 daily shifts, 7 days per week



CWD Diagnosis Confirmation at NVSL

- All testing materials (tissues, blocks, slides) sent to NVSL within 5 days
- Confirmation tests are performed at discretion of NVSL
- Western blot may not be run even if a NAHLN lab requests it
- WB requires fresh tissue, can't be performed on formalin-fixed
- WB can't always differentiate CWD from scrapie



Chronic Wasting Disease Response

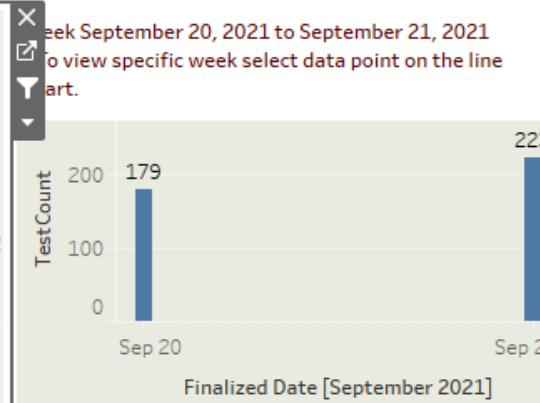
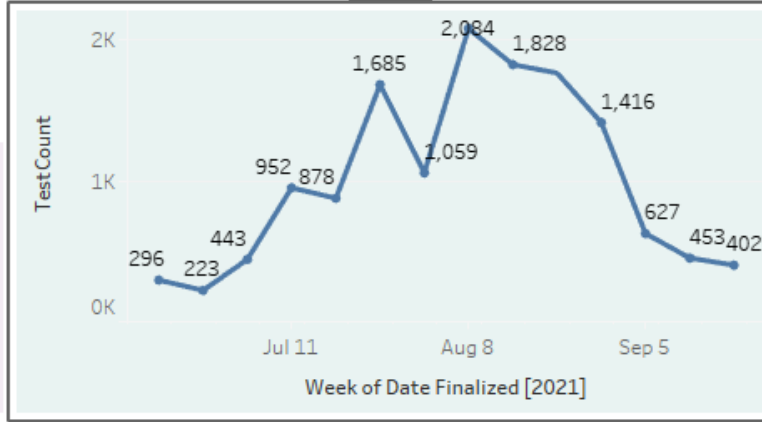
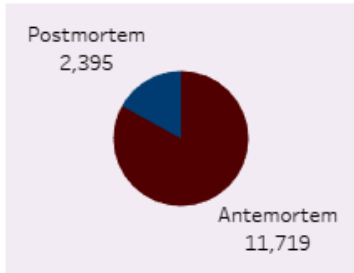
- TVMDL acquired additional personnel and resources to meet demand
 - Texas A&M System
 - Texas Parks and Wildlife Department
 - Texas A&M College of Veterinary Medicine & Biomedical Sciences



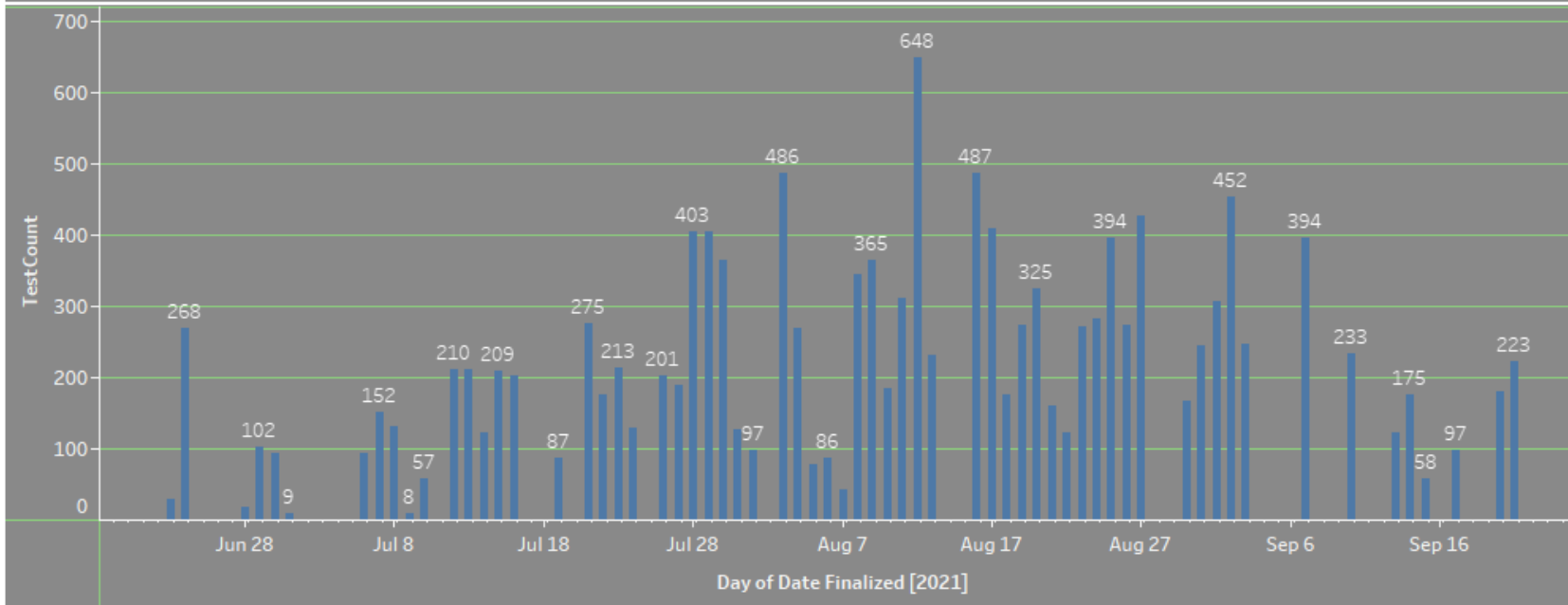
Total CWD tests finalized since June 22, 2021

14,114

* Select Pie chart to filter on antemortem or post mortem tests. Click area outside of pie chart to clear the filter.



Daily CWD All Tests Finalized



*Note: The data set of this dashboard is based on the finalized date of the accessions with CWD IHC test. Only tests in accessions that were finalized after June 22, 2021 are counted.

9/22/2021

Stated TAT = 14-21 days

50th percentile = 12 days

90th percentile = 18 days

Average = 13 days

These test numbers are average annual IHC tests compressed into 12 weeks